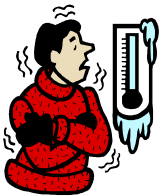


Winter Storms and Cold

Heavy snow can immobilize a region and paralyze a city, stranding commuters, stopping the flow of supplies, and disrupting emergency medical services. Heavy snow can collapse buildings and create treacherous road conditions. In rural areas, homes and farms may be isolated for days, and unprotected livestock may be lost. In the mountains, heavy snow can lead to avalanches. The cost of snow removal, repairing damages and loss of business can have large economic impacts on cities, towns and individuals. Sometimes winter storms are accompanied by strong winds, creating blizzard conditions with blinding snow, severe drifting, and dangerous wind chill. Strong winds with these storms can knock down trees, utility poles and power lines.



Extreme cold often accompanies a winter storm or is left in its wake. Prolonged exposure to the cold can cause frostbite or hypothermia and become life-threatening. Infants and elderly people are most susceptible. Frostbite is damage to body tissue being frozen and causes a loss of feeling and a white or pale appearance in extremities. If symptoms are detected, get medical help immediately. If the person is also showing signs of hypothermia, such as uncontrollable shivering, disorientation, incoherence or slurred speech, warm the body core before warming the extremities. Get the person into dry clothing, wrap them in a warm blanket covering the head and neck.

Winter storms are considered deceptive killers, because most deaths are indirectly related to the storm. Everyone is potentially at risk during winter storms. The actual threat to you depends on your specific situation. About 70% of deaths related to snow and ice occur in automobiles. Deaths attributed to exposure to cold primarily affect males over the age of 60. Avoid overexertion as the strain from the cold and hard labor may cause a heart attack.

Winter Weather Definitions

Criteria for winter weather watches, warnings and advisories are different across the nation due to terrain factors and customer needs. Even in western Colorado and eastern Utah the criteria varies based on elevation.

In order to properly prepare yourself for winter storms, you should be familiar with the following local NWS winter storm definitions:

Winter Storm Watch: Severe winter conditions, such as heavy snow and strong wind, are possible in the next 24 to 48 hours.

Winter Storm Warning: Severe winter conditions have begun or about to begin in your area. Issued when more than one winter phenomena, such as heavy snow and strong wind, are expected to occur at the same time.

Above 7500 feet

Heavy Snow Warning: More than 12 inches of snow accumulation in a 24 hour period.

Snow Advisory: 5 to 12 inches of snow in a 24 hour period.

Below 7500 feet

Heavy Snow Warning: More than 6 inches of snow accumulation in a 24 hour period.

Snow Advisory: 3 to 6 inches of snow in a 24 hour period.

In the Grand Valley and Moab area:

A **Heavy Snow Warning** implies more than 4 inches of snow in a 24 hour period.

A **Snow Advisory** is issued for 2 to 4 inches of snow in a 24 hour period.



Winter Driving Safety

If you get stuck on a snowy road, or your car slides off the road, the following guidelines will help you decide what course of action to take:

- * If the road ahead is clear and your car can be dug out, use your shovel and traction mat (or sand) to free the vehicle. Ease the vehicle out gently and steadily to avoid spinning the tires.
- * If the road ahead is not clear, or if you have slid off the road, and there is no shelter in sight, you are stranded. **Do not leave your vehicle!** It is your only certain source of shelter. Be sure the vehicle exhaust is clear of snow and keep a window slightly open for ventilation. Run the engine only a few minutes at a time in order to stay warm. Use your emergency supplies and huddle with other vehicle occupants for warmth. Tying a bright cloth (preferably red) to your car antenna will aid in your being spotted.
- * If you are stranded, do not panic. Department of Transportation maintenance crews will be working to open the highways and look for stranded motorists. If you are stranded on a secondary or backcountry road, remain in your vehicle until the storm passes so that you can be spotted.

Winter Safety Kit

Every vehicle should have the following:

- | | |
|---|----------------------|
| ✓ Sand or cat litter | ✓ Knife |
| ✓ Ice scraper/brush | ✓ Extra clothing |
| ✓ Small shovel | ✓ Toilet tissue |
| ✓ Tin can (to melt snow for water) | ✓ Paper towels |
| ✓ Waterproof matches | ✓ Tool kit |
| ✓ High-calorie, non-perishable food (peanuts, hard candy and raisins) | ✓ Tow rope/chain |
| ✓ Blankets/sleeping bags | ✓ Tire chains |
| ✓ Flashlight with extra batteries | ✓ Battery cables |
| ✓ First aid kit | ✓ Water |
| | ✓ Compass |
| | ✓ Road maps |
| | ✓ Candles |
| | ✓ Bright cloth |
| | ✓ Cell phone |
| | ✓ Coins for payphone |

Winter Safety at Home

Before a winter storm strikes, ensure that you are prepared by stocking your home with the following items:

- ✓ Flash light and extra batteries
- ✓ Battery-powered NOAA Weather Radio and commercial radio
- ✓ Extra food and bottled water
- ✓ Extra supply of critical medicine and first aid items
- ✓ Safe emergency heating source

If you must go outdoors, be sure to wear several layers of dry clothing and a warm hat. Cover your mouth with a scarf. Also, mittens preserve body heat better than gloves.

Wind Chill is a term used to describe the rate of heat loss from exposed human skin resulting from the combined effect of low temperature and wind. The Wind Chill Index is designed only for humans and has no effect on inanimate objects. Based on a recent study, the NWS has implemented an updated wind chill index for the 2001-02 winter season.

The New Wind Chill Index

Temperature (°F)

Wind (mph)

Calm	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25
5	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40
10	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47
15	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51
20	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55
25	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58
30	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60
35	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62
40	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64
45	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65
50	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67
55	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68
60	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69

Road Condition Information

Colorado:	1-877-315-ROAD www.cotrip.org
Arizona:	1-888-411-ROAD www.azfms.com
New Mexico:	1-800-432-4269 www.nmshtd.state.nm.us
Utah:	1-800-492-2400 www.dot.state.ut.us
Wyoming:	1-307-772-0824 wydotweb.state.wy.us

NOAA Weather Radio (NWR) provides broadcasts of the latest weather information from your local National Weather Service office 24 hours a day. These radios are either battery-operated portables or AC-powered desktop models with battery backup. While NOAA's weather broadcasts won't be found on most standard AM/FM radio bands, some CB radios, scanners, shortwave and maritime radios are capable of receiving the weather band frequencies. Many weather radios are small enough to take along on the road or on outdoor activities and can enable you to keep abreast of the latest weather changes.

Selected NWR Frequencies

COLORADO

Alamosa	162.475
Bethune	162.525
Colorado Spgs.	162.475
Denver	162.550
Ft. Collins	162.450
Fowler	162.425
Glenwood Spgs.	162.500
Grand Junction	162.550
Greeley	162.400
La Junta	162.500
Mead/Longmont	162.475
Montrose	162.450
Pueblo	162.400
Sterling	162.400

NEW MEXICO

Albuquerque	162.400
Farmington	162.475
Santa Fe	162.550

UTAH

Lake Powell	162.550
Logan	162.400
Milford/Cedar City	162.400
Salt Lake City	162.550
St. George (UT Hill)	162.425
Vernal	162.400

WYOMING

Evanston	162.450
Rawlins	162.425
Rock Springs	162.550

Winter Weather

A Basic Preparedness Guide



National Weather Service

792 Eagle Drive

Grand Junction, CO 81506

(970) 243-7007

(970) 243-0914 (weather recording)

<http://www.crh.noaa.gov/gjt>



Department of Transportation